



**6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R04-OAR-2013-0129; FRL- 9835-8]**

**Approval and Promulgation of Implementation Plans and Designation of Areas; North Carolina; Redesignation of the Charlotte-Gastonia-Rock Hill, 1997 8-Hour Ozone**

**Moderate Nonattainment Area to Attainment**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** On November 2, 2011, and supplemented on March 28, 2013, the State of North Carolina, through the North Carolina Department of Environment and Natural Resources, Department of Air Quality (NC DAQ), submitted a request for EPA to redesignate the portion of North Carolina that is within the bi-state Charlotte-Gastonia-Rock Hill, North Carolina-South Carolina 8-hour ozone nonattainment area (hereafter referred to as the “bi-state Charlotte Area,” “Area,” or “Metrolina nonattainment area”) to attainment for the 1997 8-hour ozone National Ambient Air Quality Standards (NAAQS); and to approve a State Implementation Plan (SIP) revision containing a maintenance plan for the Area. EPA is proposing to approve the redesignation request for the Area, along with the related SIP revisions, including North Carolina’s plan for maintaining attainment of the 1997 8-hour ozone standard in the Area. EPA is also proposing to approve a supplemental SIP revision, submitted to EPA on March 28, 2013, extending the maintenance plan to the year 2025 and updating motor vehicle emission budgets (MVEBs) for nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) for the years 2013 and 2025 for the North Carolina portion of the Area. These actions are being proposed pursuant

to the Clean Air Act (CAA or Act) and its implementing regulations. EPA finalized action to redesignate the South Carolina portion of the Area, including approval of South Carolina's maintenance plan for the 1997 8-hour ozone NAAQS, in a separate action.

**DATES:** Comments must be received on or before [insert date 30 days after date of publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R04-OAR-2013-0129, by one of the following methods:

1. [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
2. E-mail: [R4-RDS@epa.gov](mailto:R4-RDS@epa.gov).
3. Fax: (404) 562-9019.
4. Mail: EPA-R04-OAR-2013-0129, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960.
5. Hand Delivery or Courier: Ms. Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

*Instructions:* Direct your comments to Docket ID No. EPA-R04-OAR-2013-0129. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through [www.regulations.gov](http://www.regulations.gov) or e-mail, information that you consider to be CBI or otherwise protected. The [www.regulations.gov](http://www.regulations.gov) website is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

*Docket:* All documents in the electronic docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Jane Spann or Sara Waterson of the Regulatory Development Section, in the Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Ms. Spann may be reached by phone at (404) 562-9029, or via electronic mail at [spann.jane@epa.gov](mailto:spann.jane@epa.gov). Ms. Waterson may be reached by phone at (404) 562-9061, or via electronic mail at [waterson.sara@epa.gov](mailto:waterson.sara@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

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- I. What are the Actions EPA is Proposing to Take?**

EPA is proposing to take the following two separate but related actions, one of which involves multiple elements: (1) to redesignate the North Carolina portion of the bi-state Charlotte Area to attainment for the 1997 8-hour ozone NAAQS; and (2) to approve into the North Carolina SIP, under section 175A of the CAA, North Carolina’s plan for maintaining the 1997 8-hour ozone NAAQS (1997 ozone NAAQS maintenance plan). EPA’s proposed action for the maintenance plan also includes proposed approval of the associated MVEBs. Through today’s rulemaking, EPA is also notifying the public of the status of EPA’s adequacy determination for the MVEBs for the North Carolina portion of the bi-state Charlotte Area. The bi-state Charlotte Area consists of Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan, Union and a portion of Iredell County (Davidson and Coddle Creek Townships), North Carolina; and a portion of York County, South Carolina. These actions are summarized below and described in greater detail throughout this notice of proposed rulemaking.

First, EPA proposes to determine that the North Carolina portion of the bi-state Charlotte Area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA.

Accordingly, in this action, EPA is proposing to approve a request to change the legal designation of Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg Rowan and Union Counties in their entirety, and a portion of Iredell County (Davidson and Coddle Creek Townships) in North Carolina from nonattainment to attainment for the 1997 8-hour ozone NAAQS.

Second, EPA is proposing to approve North Carolina's November 2, 2011, SIP revision (as supplemented by a March 28, 2013, SIP submittal) for the 1997 8-hour ozone NAAQS maintenance plan for the North Carolina portion of the bi-state Charlotte Area as meeting the requirements of section 175A (such approval being one of the CAA criteria for redesignation to attainment status). The maintenance plan is designed to help keep the bi-state Charlotte Area in attainment of the 1997 8-hour ozone NAAQS through 2025. Consistent with the CAA, EPA is proposing to take action to approve the 2013 and 2025 MVEBs in North Carolina's March 28, 2013, SIP revision.

EPA is also notifying the public of the status of EPA's adequacy process for the newly-established NO<sub>x</sub> and VOC MVEBs for 2013 and 2025 for the North Carolina portion of the bi-state Charlotte Area. The Adequacy comment period for the 2013 and 2025 MVEBs for the North Carolina portion of the bi-state Charlotte Area began on February 21, 2013, with EPA's posting of the availability of North Carolina's submissions on EPA's Adequacy website (<http://www.epa.gov/otaq/stateresources/transconf/currsips.htm#charlotte1111>). The Adequacy comment period for these MVEBs closed on March 25, 2013. Please see section VII of this proposed rulemaking for further explanation of this process and for more details on the MVEBs.

Today's notice of proposed rulemaking is in response to North Carolina's November 2, 2011, SIP revision (as supplemented by a March 28, 2013, SIP submission). These SIP revisions address the specific issues summarized above and the necessary elements described in section 107(d)(3)(E) of the CAA for redesignation of the North Carolina portion of the bi-state Charlotte Area to attainment of the 1997 8-hour ozone NAAQS.

## **II. What is the Background for EPA's Proposed Actions?**

On July 18, 1997, EPA promulgated a revised 8-hour ozone NAAQS of 0.08 parts per million (ppm). Under EPA's regulations at 40 CFR part 50, the 1997 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.08 ppm (i.e., 0.084 ppm when rounding is considered) (69 FR 23857, April 30, 2004). Ambient air quality monitoring data for the 3-year period must meet a data completeness requirement. The ambient air quality monitoring data completeness requirement is met when the average percent of days with valid ambient monitoring data is greater than 90 percent, and no single year has less than 75 percent data completeness as determined in Appendix I of part 50.

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate as nonattainment any area that is violating the NAAQS, based on the three most recent years of complete, quality assured, and certified ambient air quality data at the conclusion of the designation process. The bi-state Charlotte Area was designated nonattainment for the 1997 8-hour ozone NAAQS on April 30, 2004 (effective June 15, 2004) using 2001-2003 ambient air quality data (69 FR 23857, April 30, 2004). At the time of designation, the bi-state Charlotte

Area was classified as a moderate nonattainment area for the 1997 8-hour ozone NAAQS. In the April 30, 2004, Phase I Ozone Implementation Rule, EPA established ozone nonattainment area attainment dates based on Table 1 of section 181(a) of the CAA. This established an attainment date six years after the June 15, 2004, effective date for areas classified as moderate areas for the 1997 8-hour ozone nonattainment designations. Section 181 of the CAA explains that the attainment date for moderate nonattainment areas shall be as expeditiously as practicable, but no later than six years after designation, or June 15, 2010. Therefore, the bi-state Charlotte Area's original attainment date was June 15, 2010. *See* 69 FR 23951, April 30, 2004.

On November 12, 2009,<sup>1</sup> North Carolina submitted an attainment demonstration and associated reasonably available control measures (RACM), a reasonable further progress (RFP) plan,<sup>2</sup> contingency measures, a 2002 base year emissions inventory, and other planning SIP revisions related to attainment of the 1997 8-hour ozone NAAQS in the North Carolina portion of the Area. North Carolina submitted a supplement to the attainment demonstration on April 5, 2010, which provided supplemental information including the 2009 ambient air quality data (showing that the area qualified for a one-year extension to the attainment date).

The bi-state Charlotte Area did not attain the 1997 8-hour ozone NAAQS by June 15, 2010 (the applicable attainment date for moderate nonattainment areas); however, the Area qualified for an extension of the attainment date. Under certain circumstances, the CAA allows for extensions of the attainment dates prescribed at the time of the original nonattainment

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<sup>1</sup> North Carolina withdrew a June 15, 2007, attainment demonstration SIP for its portion of the Charlotte-Gastonia-Rock Hill 1997 8-hour ozone area on December 19, 2008, and committed to submit a revised SIP by November 30, 2009. On November 12, 2009, North Carolina resubmitted the attainment demonstration SIP for the North Carolina portion of the Charlotte-Gastonia-Rock Hill 1997 8-hour ozone area.

<sup>2</sup> A supplement to the RFP was submitted on November 30, 2009.



designation. In accordance with CAA section 181(a)(5), EPA may grant up to two one-year extensions of the attainment date under specified conditions. On May 31, 2011, EPA determined that the bi-state Charlotte Area met the CAA requirements to obtain a one-year extension of the attainment date for the 1997 8-hour ozone NAAQS. *See* 76 FR 31245. As a result, EPA extended the bi-state Charlotte Area's attainment date from June 15, 2010, to June 15, 2011, for the 1997 8-hour ozone NAAQS.

On November 2, 2011, North Carolina requested redesignation of the North Carolina portion of the bi-state Charlotte Area to attainment for the 1997 8-hour ozone NAAQS. The redesignation request included three years of complete, quality-assured ambient air quality data for the 1997 8-hour ozone NAAQS for 2008-2010, indicating that the 1997 8-hour ozone NAAQS had been achieved for the Area. Under the CAA, nonattainment areas may be redesignated to attainment if sufficient, complete, quality-assured data is available for the Administrator to determine that the area has attained the standard and the area meets the other CAA redesignation requirements in section 107(d)(3)(E).

Subsequently, on November 15, 2011 (76 FR 70656), EPA determined that the bi-state Charlotte Area attained the 1997 8-hour ozone NAAQS. The determination of attaining data was based upon complete, quality-assured and certified ambient air monitoring data for the 2008–2010 period, showing that the Area had monitored attainment of the 1997 8-hour ozone NAAQS. The requirements for the Area to submit an attainment demonstration and associated RACM, RFP plan, contingency measures, and other planning SIP revisions related to attainment of the standard were suspended as a result of the determination of attainment, so long as the Area continues to attain the 1997 8-hour ozone NAAQS. *See* 40 CFR 51.918 and 52.2125(a). The

Area attained the 1997 8-hour ozone NAAQS with 2009–2011 data, and preliminary data indicate that the Area continues to attain with 2010-2012 data.

On January 12, 2012, North Carolina withdrew the North Carolina portion of the Area's attainment demonstration (except RFP, emissions statements, and the emissions inventory) as allowed by 40 CFR 51.918. Therefore, EPA was not required to take action on the aforementioned portion of the attainment demonstration. EPA approved the emissions statements portion of the attainment demonstration SIP revision on April 24, 2012 (77 FR 24382). Additionally, EPA approved the baseline emissions inventory portion of the attainment demonstration SIP revision on May 4, 2012 (77 FR 26441). EPA approved the RFP portion on October 12, 2012 (77 FR 62159).

The March 28, 2013, supplemental SIP revision extends the final year of the maintenance plan to 2025. Specifically, this revision updates emissions data, emissions projections, MVEBs, and safety margins to 2025. Additionally, it provides updated ozone design values for the bi-state Charlotte Area.

### **III. What are the Criteria for Redesignation?**

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation providing that: (1) the Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k); (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and

applicable Federal air pollutant control regulations and other permanent and enforceable reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and, (5) the state containing such area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

On April 16, 1992, EPA provided guidance on redesignation in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 (57 FR 13498), and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. “Ozone and Carbon Monoxide Design Value Calculations,” Memorandum from Bill Laxton, Director, Technical Support Division, June 18, 1990;
2. “Maintenance Plans for Redesignation of Ozone and Carbon Monoxide Nonattainment Areas,” Memorandum from G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, April 30, 1992;
3. “Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations,” Memorandum from G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992;

4. “Procedures for Processing Requests to Redesignate Areas to Attainment,”  
Memorandum from John Calcagni, Director, Air Quality Management Division,  
September 4, 1992 (hereafter referred to as the “Calcagni Memorandum”);
5. “State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act  
(CAA) Deadlines,” Memorandum from John Calcagni, Director, Air Quality  
Management Division, October 28, 1992;
6. “Technical Support Documents (TSDs) for Redesignation of Ozone and Carbon  
Monoxide (CO) Nonattainment Areas,” Memorandum from G. T. Helms, Chief,  
Ozone/Carbon Monoxide Programs Branch, August 17, 1993;
7. “State Implementation Plan (SIP) Requirements for Areas Submitting Requests for  
Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National  
Ambient Air Quality Standards (NAAQS) On or After November 15, 1992,”  
Memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and  
Radiation, September 17, 1993;
8. “Use of Actual Emissions in Maintenance Demonstrations for Ozone and CO  
Nonattainment Areas,” Memorandum from D. Kent Berry, Acting Director, Air  
Quality Management Division, November 30, 1993;

9. “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994;
10. “Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard,” Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, May 10, 1995; and
11. “Next Steps for Pending Redesignation Requests and State Implementation Plan Actions Affected by the Recent Court Decision Vacating the 2011 Cross-State Air Pollution Rule,” Memorandum from Gina McCarthy, Assistant Administrator, November 19, 2012.

#### **IV. Why is EPA Proposing These Actions?**

On November 2, 2011, and later supplemented on March 28, 2013, the State of North Carolina, through NC DAQ, requested the redesignation of the North Carolina portion of the bi-state Charlotte Area to attainment for the 1997 8-hour ozone NAAQS. EPA’s evaluation indicates that the entire bi-state Charlotte Area has attained the 1997 8-hour ozone NAAQS, and that North Carolina meets the requirements for redesignation for its portion of the bi-state Charlotte Area as set forth in section 107(d)(3)(E), including the maintenance plan requirements under section 175A of the CAA. As a result, EPA is proposing to take the two related actions

summarized in section I of this notice.

## **V. What is EPA's Analysis of the Request?**

As stated above, in accordance with the CAA, EPA proposes in today's action to: (1) redesignate the North Carolina portion of the bi-state Charlotte Area to attainment for the 1997 8-hour ozone NAAQS; and (2) approve the North Carolina portion of the bi-state Charlotte Area's 1997 8-hour ozone NAAQS maintenance plan, including the associated MVEBs, into the North Carolina SIP. These actions are based upon EPA's determination that the entire bi-state Charlotte Area continues to attain the 1997 8-hour ozone NAAQS, and that all other redesignation criteria have been met for the North Carolina portion of the bi-state Charlotte Area. The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the Area in the following paragraphs of this section.

### **Criteria (1) - *The bi-state Charlotte Area has attained the 1997 8-hour ozone NAAQS.***

For ozone, an area may be considered to be attaining the 1997 8-hour ozone NAAQS if it meets the 1997 8-hour ozone standard, as determined in accordance with 40 CFR 50.10 and Appendix I of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain these NAAQS, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm. Based on the data handling and reporting convention described in 40 CFR part 50, Appendix I, the NAAQS are attained if the design value is 0.084

ppm or below. The data must be collected and quality-assured in accordance with 40 CFR part 58, and recorded in the EPA Air Quality System (AQS) database. The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

As mentioned above, on November 15, 2011 (76 FR 70656), EPA determined that the bi-state Charlotte Area was attaining the 1997 8-hour ozone NAAQS. For that action, EPA reviewed ozone monitoring data from monitoring stations in the bi-state Charlotte Area for the 1997 8-hour ozone NAAQS for 2008-2010. These data have been quality-assured and are recorded in AQS. EPA has reviewed the 2009-2011 certified and 2010-2012 preliminary data which indicate that the Area continues to attain the 1997 8-hour ozone NAAQS beyond the submitted 3-year attainment period of 2008-2010. The fourth-highest 8-hour ozone average for 2008, 2009 and 2010, and the 3-year average of these values (i.e., design values), are summarized in the following Table 1 of this proposed rulemaking.

**Table 1. 2008 – 2010 Design Value Concentrations for the Bi-State Charlotte 1997 8-Hour Ozone Area\* (parts per million)**

| Location                              | County      | Monitor ID  | Annual Arithmetic Mean Concentrations (ppm) |       |       | 3-Year Design Values (ppm) |
|---------------------------------------|-------------|-------------|---|-------|-------|----------------------------|
|                                       |             |             | 2008  | 2009  | 2010  | 2008-2010                  |
| Lincoln County Replacing Iron Station | Lincoln     | 37-109-0004 | 0.079                                       | 0.065 | 0.072 | 0.072                      |
| Garinger High School                  | Mecklenburg | 37-119-0041 | 0.085                                       | 0.069 | 0.082 | 0.078                      |
| Westinghouse Blvd                     | Mecklenburg | 37-119-1005 | 0.073                                       | 0.068 | 0.078 | 0.073                      |
| 29 N at Mecklenburg Cab Co.           | Mecklenburg | 37-119-1009 | 0.093                                       | 0.071 | 0.082 | 0.082                      |
| Rockwell                              | Rowan       | 37-159-0021 | 0.084                                       | 0.071 | 0.077 | 0.077                      |

|                      |       |             |       |       |       |       |
|----------------------|-------|-------------|-------|-------|-------|-------|
| Enochville School    | Rowan | 37-159-0022 | 0.082 | 0.073 | 0.078 | 0.077 |
| Monroe Middle School | Union | 37-179-0003 | 0.08  | 0.067 | 0.071 | 0.072 |

\*An ozone monitor is located in York County, SC; however, it is outside of the nonattainment area. This monitor is monitoring attainment of the 1997 8-hour ozone NAAQS.

**Table 2. 2009 – 2011 Design Value Concentrations for the Bi-State Charlotte 1997 8-Hour Ozone Area\* (parts per million)**

| Location                              | County      | Monitor ID  | 4th Highest 8-hour Ozone Value |       |       | 3-Year Design Values |
|---------------------------------------|-------------|-------------|--------------------------------|-------|-------|----------------------|
|                                       |             |             | 2009                           | 2010  | 2011  | 2009 - 2011          |
| Lincoln County Replacing Iron Station | Lincoln     | 37-109-0004 | 0.065                          | 0.072 | 0.077 | 0.071                |
| Garinger High School                  | Mecklenburg | 37-119-0041 | 0.069                          | 0.082 | 0.088 | 0.079                |
| Westinghouse Blvd                     | Mecklenburg | 37-119-1005 | 0.068                          | 0.078 | 0.082 | 0.076                |
| 29 N at Mecklenburg Cab Co.           | Mecklenburg | 37-119-1009 | 0.071                          | 0.082 | 0.083 | 0.078                |
| Rockwell                              | Rowan       | 37-159-0021 | 0.071                          | 0.077 | 0.077 | 0.075                |
| Enochville School                     | Rowan       | 37-159-0022 | 0.073                          | 0.078 | 0.078 | 0.076                |
| Monroe Middle School                  | Union       | 37-179-0003 | 0.067                          | 0.071 | 0.073 | 0.07                 |

\*An ozone monitor is located in York County, SC; however, it is outside of the nonattainment area. This monitor is monitoring attainment of the 1997 8-hour ozone NAAQS.

**Table 3. 2010 – 2012 Design Value Concentrations for the Bi-State Charlotte 1997 8-Hour Ozone Area\* (parts per million)**

| Location                              | County  | Monitor ID  | 4th Highest 8-hour Ozone Value |       |       | 3-Year Design Values |
|---------------------------------------|---------|-------------|--------------------------------|-------|-------|----------------------|
|                                       |         |             | 2010                           | 2011  | 2012  | 2010 - 2012          |
| Lincoln County Replacing Iron Station | Lincoln | 37-109-0004 | 0.072                          | 0.077 | 0.076 | 0.075                |



|                             |             |             |       |       |       |       |
|-----------------------------|-------------|-------------|-------|-------|-------|-------|
| Garinger High School        | Mecklenburg | 37-119-0041 | 0.082 | 0.088 | 0.080 | 0.083 |
| Westinghouse Blvd           | Mecklenburg | 37-119-1005 | 0.078 | 0.082 | 0.073 | 0.077 |
| 29 N at Mecklenburg Cab Co. | Mecklenburg | 37-119-1009 | 0.082 | 0.083 | 0.085 | 0.083 |
| Rockwell                    | Rowan       | 37-159-0021 | 0.077 | 0.077 | 0.080 | 0.078 |
| Enochville School           | Rowan       | 37-159-0022 | 0.078 | 0.078 | 0.077 | 0.077 |
| Monroe Middle School        | Union       | 37-179-0003 | 0.071 | 0.073 | 0.075 | 0.073 |

\*An ozone monitor is located in York County, SC; however, it is outside of the nonattainment area. This monitor is monitoring attainment of the 1997 8-hour ozone NAAQS.

The 3-year design value for 2008-2010 submitted by North Carolina for redesignation of its portion of the bi-state Charlotte Area is 0.082 ppm at the 29 N at Mecklenburg Cab Co. monitor,<sup>3</sup> which meets the NAAQS as described above. As mentioned above, on November 15, 2011 (76 FR 70656), EPA published a clean data determination for the bi-state Charlotte Area for the 1997 8-hour ozone NAAQS. The 2009-2011 certified data show that the bi-state Charlotte Area continues to attain the 1997 8-hour ozone NAAQS with a design value of 0.079 ppm at the Garinger High School monitor. After review of the certified 2010-2012 data, the Area continues to attain the 1997 8-hour ozone NAAQS with a design value of 0.083 ppm at the Garinger High School and 29 N at Mecklenburg Cab Co. monitors. In today's action, EPA is proposing to determine that the bi-state Charlotte Area is attaining the 1997 8-hour ozone NAAQS. EPA will not go forward with the redesignation if the bi-state Charlotte Area does not continue to attain the NAAQS until the time that EPA finalizes the redesignation. As discussed

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<sup>3</sup> The monitor with the highest 3 year design value is considered the design value for the area.

in more detail below, the State of North Carolina has committed to continue monitoring in this Area in accordance with 40 CFR part 58.

***Criteria (2) – North Carolina has a fully approved SIP under section 110(k) for the North Carolina Portion of the Charlotte Area; and Criteria (5) – North Carolina has met all applicable requirements under section 110 and part D of title I of the CAA.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of title I of the CAA (CAA section 107(d)(3)(E)(v)) and that the state has a fully approved SIP under section 110(k) for the area (CAA section 107(d)(3)(E)(ii)). EPA proposes to find that North Carolina has met all applicable SIP requirements for the North Carolina portion of the Area under section 110 of the CAA (general SIP requirements) for purposes of redesignation. Additionally, EPA proposes to find that the North Carolina SIP satisfies the criterion that it meets applicable SIP requirements for purposes of redesignation under part D of title I of the CAA (requirements specific to 1997 8-hour ozone nonattainment areas) in accordance with section 107(d)(3)(E)(v). Further, EPA proposes to determine that the SIP is fully approved with respect to all requirements applicable for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). In making these determinations, EPA ascertained which requirements are applicable to the Area and, if applicable, that they are fully approved under section 110(k). SIPs must be fully approved only with respect to requirements that were applicable prior to submittal of the complete redesignation request.

a. The North Carolina Portion of the Charlotte Area has met all applicable requirements under section 110 and part D of the CAA.

*General SIP requirements.* General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)) and provisions for the implementation of part D requirements (New Source Review (NSR) permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants (e.g., NO<sub>x</sub> SIP Call<sup>4</sup> and the Clean Air Interstate Rule (CAIR)<sup>5</sup>). The

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<sup>4</sup> On October 27, 1998 (63 FR 57356), EPA issued a NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub> in order to reduce the transport of ozone and ozone precursors. In compliance with EPA's NO<sub>x</sub> SIP Call, North Carolina developed rules governing the control of NO<sub>x</sub> emissions from electric generating units (EGUs), major non-EGU industrial boilers, major cement kilns, and internal combustion engines. On October 5, 2007, EPA approved North Carolina's rules as fulfilling Phase I of the NO<sub>x</sub> SIP Call (72 FR 56914).

<sup>5</sup> On May 12, 2005, EPA published the Clean Air Interstate Rule (CAIR), which requires significant reductions in emissions of sulfur dioxide (SO<sub>2</sub>) and NO<sub>x</sub> from certain electric generating units in the eastern United States to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See* 76 FR 70093. The United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) initially vacated CAIR in *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur in *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008) to preserve the environmental benefits provided by CAIR. In response to the court's decision, EPA issued the Cross-State Air Pollution Rule (CSAPR) to address interstate transport of NO<sub>x</sub> and SO<sub>2</sub> in the eastern United States. *See* 76 FR 48208 (August 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d. 7 (D.C. Cir., 2012). In that decision, the court also ordered EPA to

section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that the CAA's interstate transport requirements should be construed to be applicable requirements for purposes of redesignation. However, as discussed later in this notice, addressing pollutant transport from other states is an important part of the maintenance demonstration for the bi-state Charlotte Area.

In addition, EPA believes that other section 110 elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated. The section 110 and part D requirements that are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. *See* Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996), (62 FR 24826, May 7, 1997); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). *See also* the discussion on this

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continue administering CAIR "pending the promulgation of a valid replacement." EPA filed a petition for a writ of certiorari with the U.S. Supreme Court on March 29, 2013, to review the D.C. Circuit's decision in *EME Homer City*. On June 24, 2013, the U.S. Supreme Court granted the United States' petition asking the Court to review the D.C. Circuit Court's decision on CSAPR. However, the Agency will continue to act in accordance with *EME Homer City* pending final resolution of the CSAPR litigation.

issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001).

EPA completed rulemaking on a December 12, 2007, submittal and a clarification in a June 20, 2008, submission addressing “infrastructure SIP” elements required under CAA section 110(a)(2) on February 6, 2012. *See* 77 FR 5703. However, these are statewide requirements that are not a consequence of the nonattainment status of the North Carolina portion of the Area. As stated above, EPA believes that section 110 elements not linked to an area’s nonattainment status are not applicable for purposes of redesignation. Therefore, EPA believes it has approved all SIP elements under section 110 that must be approved as a prerequisite for redesignating the North Carolina portion of the Area to attainment.

*Title I, Part D, subpart 1 applicable SIP requirements.* Sections 172(c)(1) through (9) and section 176 of subpart 1, part D of the CAA, set forth the basic nonattainment requirements applicable to all nonattainment areas. A thorough discussion of the requirements contained in section 172 can be found in the General Preamble for Implementation of title I (57 FR 13498, April 16, 1992). Subpart 2 of part D, which includes section 182 of the CAA, establishes additional specific requirements depending on the area’s ozone nonattainment classification. A thorough discussion of the requirements contained in section 182 can be found in the General Preamble for Implementation of Title I (57 FR 13498).

*Part D Subpart 1 Section 172 Requirements and Part D, Subpart 2 Section 182 Requirements.* Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all RACM as expeditiously as practicable and to provide for attainment of the

national primary ambient air quality standards. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in each area as components of the area's attainment demonstration. Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. Section 182 of the CAA, found in subpart 2 of part D, establishes additional specific requirements depending on the area's ozone nonattainment classification. For purposes of evaluating this redesignation request, the applicable part D, subpart 2 SIP requirements for all moderate nonattainment areas are contained in sections 182(b)(1)–(5). However, pursuant to 40 CFR 51.918, EPA's November 15, 2011, determination that the bi-state Charlotte Area was attaining the 1997 8-hour ozone NAAQS suspended North Carolina's obligation to submit most of the attainment planning requirements that would otherwise apply. Specifically, the determination of attainment suspended North Carolina's obligation to submit an attainment demonstration and planning SIPs to provide for RACM under section 172(c)(1), contingency measures under section 172(c)(9) and RFP under section 182(b)(1) of the CAA.

The General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992) also discusses the evaluation of the section 172 and 182 requirements in the context of EPA's consideration of a redesignation request. The General Preamble sets forth EPA's view of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard (General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992)).

Because attainment has been reached in the bi-state Charlotte Area, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements for an attainment demonstration and RACM are no longer considered to be applicable for purposes of redesignation as long as the Area continues to attain the standard until redesignation. *See also* 40 CFR 51.918.

Pursuant to sections 172(c)(2) and 182(b)(1), nonattainment plans for areas classified as moderate and above for ozone must contain provisions that require reasonable further progress toward attainment. These requirements are not relevant for purposes of redesignation because EPA has determined that the bi-state Charlotte Area has monitored attainment of the 1997 8-hour ozone NAAQS. *See* General Preamble, 57 FR 13564. *See also* 40 CFR 51.918. While it is not a requirement for redesignation, EPA took action to approve North Carolina's RFP for the 1997 8-hour ozone NAAQS for the State's portion of the bi-state Charlotte Area on October 12, 2012. *See* 77 FR 62159.

Section 172(c)(3) and section 182(b) require submission and approval of a comprehensive, accurate, and current inventory of actual emissions. Section 182(b) references section 182(a) of the CAA which requires, in part, for states to submit a current inventory of actual emissions (182(a)(1)). As part of North Carolina's attainment demonstration for the North Carolina portion of the Area, NC DAQ submitted a 2002 base year emissions inventory. EPA approved the 2002 base year inventory submitted with the attainment demonstration on May 4, 2012, as meeting the section 172(c)(3) and section 182(b) (182(a)(1)) emissions inventory requirement. *See* 77 FR 26441.

Section 172(c)(4) requires the identification and quantification of allowed emissions from major new and modified stationary sources in an area, and section 172(c)(5) and section 182(b) that require permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, because PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, “Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment.” North Carolina has demonstrated that the North Carolina portion of the bi-state Charlotte Area will be able to maintain the NAAQS without part D NSR in effect, and therefore North Carolina need not have fully approved part D NSR programs prior to approval of the redesignation request. Nonetheless, North Carolina currently has an approved part D NSR program in place. North Carolina’s PSD program will become applicable in the North Carolina portion of the bi-state Charlotte Area upon redesignation to attainment. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, EPA believes the North Carolina SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.



Section 182(b) references, in part, section 182(a)(3), which requires states to submit periodic inventories and emissions statements. Section 182(a)(3)(A) of the CAA requires states to submit a periodic inventory every three years. The periodic emissions inventory is discussed in more detail in Criteria (4)(e), *Verification of Continued Attainment*.

Section 182(a)(3)(B) of the CAA requires states with areas designated nonattainment for the ozone NAAQS to submit a SIP revision to require emissions statements to be submitted to the state by sources within that nonattainment area. EPA approved North Carolina's emissions statements requirement on August 1, 1997, and approved the updated counties on April 24, 2012. *See* 64 FR 41277 and 77 FR 24382, respectively. EPA believes the North Carolina SIP meets the requirements of section 182(a)(3)(B) applicable for purposes of redesignation.

Section 182(b)(2) of the CAA requires states with areas designated nonattainment for the ozone NAAQS to submit a SIP revision to require reasonably available control technology (RACT) for all major VOC and NO<sub>x</sub> sources and for each category of VOC sources in the Area covered by a Control Techniques Guidelines (CTG) document.<sup>6</sup>

The CTGs established by EPA are guidance to the states and provide recommendations only. A state can develop its own strategy for what constitutes RACT for the various CTG categories, and EPA will review that strategy in the context of the SIP process and determine whether it meets the RACT requirements of the CAA and its implementing regulations. If no major sources of VOC or NO<sub>x</sub> emissions (which should be considered separately) or no sources in a particular source category exist in an applicable nonattainment area, a state may submit a negative declaration for that category.

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<sup>6</sup> 40 CFR 51.912 identifies the requirements that apply for RACT under the 8-hour ozone NAAQS.

North Carolina did a RACT analysis for major VOC and NO<sub>x</sub> sources in the Area and determined that these sources in the bi-state Charlotte Area meet RACT. In addition, EPA did a NO<sub>x</sub> RACT analysis of the North Carolina portion of the Charlotte Area major sources and determined that these sources meet RACT. North Carolina also made a negative declaration for CTG category sources in the June 15, 2007, SIP submittal. On May 9, 2013, EPA approved a number of North Carolina NO<sub>x</sub> RACT SIP revisions and approved in part and conditionally approved in part a number of VOC RACT SIP revisions. *See* 78 FR 27065.

North Carolina submitted a SIP revision on May 1, 2013, to EPA to address the requirements of the conditional approval to correct the deficiencies for which EPA proposed conditional approval related to North Carolina's RACT submission. On June 7, 2013, EPA proposed to approve portions of North Carolina's May 1, 2013, SIP revision which included changes to the State's RACT rules to correct deficiencies and add new changes. *See* 78 FR 34306. EPA did not receive any comments, adverse or otherwise, on the June 7, 2013, proposed rulemaking related to North Carolina's May 1, 2013, SIP revision. On July 12, 2013, the Acting Regional Administrator for EPA Region 4 signed a final rulemaking approving North Carolina's May 1, 2013, SIP revision to correct deficiencies for North Carolina RACT requirements. EPA has preliminarily determined that North Carolina's SIP meets the section 182(b)(2) requirements applicable for purposes of redesignation.<sup>7</sup>

Under section 202(a)(6) of the CAA, 42 U.S.C. 7521(a)(6), the requirements of section 182(b)(3) do not apply in moderate ozone nonattainment areas after EPA promulgated the

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<sup>7</sup> EPA approved South Carolina's RACT SIP revisions and concluded that the South Carolina portion of the Area has met all the statutory and regulatory requirements for making a negative declaration regarding Groups I, II, III, and IV CTG and meets the requirements of section 182(b)(2) applicable for purposes of redesignation. *See* 76 FR 72844.

onboard refueling vapor recovery (ORVR) standards on April 6, 1994 (59 FR 16262), codified at 40 CFR parts 86 (including 86.098-8), 88 and 600. As mentioned above, the bi-state Charlotte Area was designated as a moderate area for the 1997 8-hour ozone NAAQS and therefore was not subject to the Stage II requirements as set forth in section 182(b)(3).

Section 182(b)(4) of the CAA requires states with areas designated nonattainment with moderate or above classification for the ozone NAAQS to submit SIPs requiring inspection and maintenance of vehicles (I/M). North Carolina's I/M rule for the North Carolina portion of the nonattainment area, called the Clean Air Bill, was submitted to EPA on August 7, 2002, and approved by EPA on October 30, 2002 (67 FR 66056), effective December 30, 2002. EPA believes that the North Carolina SIP meets the requirements of section 182(b)(4) applicable for purposes of redesignation.

Section 182(b)(5) of the CAA requires that for purposes of satisfying the emission offset requirements of Part D, the ratio of total emission reductions of VOCs to total increase emissions of VOCs must be at least 1.15 to 1. North Carolina currently requires these offsets. *See* 40 CFR 52.1770. EPA therefore believes that the North Carolina SIP meets the requirements of section 182(b)(5) applicable for purposes of redesignation.

*Section 176 Conformity Requirements.* Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other federally supported or funded projects (general conformity).

State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA interprets the conformity SIP requirements<sup>8</sup> as not applying for purposes of evaluating a redesignation request under section 107(d) because state conformity rules are still required after redesignation and Federal conformity rules apply where state rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (6<sup>th</sup> Cir. 2001) (upholding this interpretation); *see also* 60 FR 62748 (December 7, 1995) (redesignation of Tampa, Florida).

For all of the reasons discussed above, the North Carolina portion of the bi-state Charlotte Area has satisfied all applicable requirements for purposes of redesignation under section 110 and part D of title I of the CAA.

*b. The North Carolina portion of the bi-state Charlotte Area has a fully approved applicable SIP under section 110(k) of the CAA.*

EPA may rely on prior SIP approvals in approving a redesignation request (*see* Calcagni Memorandum at p. 3; *Northwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984 (6<sup>th</sup> Cir. 1998); *Wall*, 265 F.3d 426) plus any additional measures it may approve in conjunction with a redesignation action (*see* 68 FR 25426 (May 12, 2003) and citations therein). Following passage of the CAA of 1970, North Carolina has adopted and submitted, and EPA has fully approved at various times, provisions addressing various 1997 8-hour ozone NAAQS SIP elements applicable in the North Carolina portion of the Area (May 31, 1972, 37 FR 10842; July

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<sup>8</sup> CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain Federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from the MVEBs that are established in control strategy SIPs and maintenance plans.

13, 2011, 76 FR 41111). For example, EPA approved the emissions statements portion of the attainment demonstration SIP revision on April 24, 2012 (77 FR 24382), and the baseline emissions inventory portion of the attainment demonstration SIP revision on May 4, 2012 (77 FR 26441).

On April 29, 2013, EPA signed a Federal Register notice approving in-part and conditionally approving in-part the RACT demonstration for the North Carolina portion of the bi-state Charlotte Area. *See* 78 FR 27065 (May 9, 2013). On May 1, 2013, North Carolina submitted a SIP revision to meet the aforementioned conditional approval. EPA proposed to approve North Carolina's May 1, 2013, RACT SIP revision that fulfills the conditional approval on June 7, 2013. *See* 78 FR 34306. EPA did not receive any comments, adverse or otherwise, on the June 7, 2013, proposed rulemaking related to North Carolina's May 1, 2013, SIP revision. On July 12, 2013, the Acting Regional Administrator for EPA Region 4 signed a final rulemaking approving North Carolina's May 1, 2013, SIP revision to correct deficiencies for North Carolina RACT requirements.

As indicated above, EPA believes that the section 110 elements that are neither connected with nonattainment plan submissions nor linked to an area's nonattainment status are not applicable requirements for purposes of redesignation. *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004); 68 FR 25424, 25427 (May 12, 2003) (redesignation of the St. Louis-East St. Louis Area to attainment of the 1-hour ozone NAAQS).

***Criteria (3) - The air quality improvement in the bi-state Charlotte 1997 8-hour ozone NAAQS Nonattainment Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions (CAA section 107(d)(3)(E)(iii)). EPA believes that North Carolina has demonstrated that the observed air quality improvement in the bi-state Charlotte Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, Federal measures, and other state adopted measures.

State, local, and Federal measures enacted in recent years have resulted in permanent emission reductions. Most of these emission reductions are enforceable through regulations. A few non-regulatory measures also result in emission reductions.

The state and local measures that have been implemented to date and relied upon by North Carolina to demonstrate attainment and/or maintenance include the Clean Air Bill I/M program; open burning ban; NO<sub>x</sub> SIP Call; Clean Smokestacks Act; and Diesel Emissions Reduction Act (DERA) grants for repower or replacement of existing diesel engines. Local measures implemented by Mecklenburg County Air Quality (MCAQ) include prohibition of open burning of any kind and diesel engine emission reductions. Of these measures, the Clean Air Bill I/M program, open burning ban, NO<sub>x</sub> SIP Call and Clean Smokestacks Act are

permanent and enforceable. The Federal measures that have been implemented include the following:

*Tier 2 vehicle standards.* Implementation began in 2004 and will require all passenger vehicles in any manufacturer's fleet to meet an average standard of 0.07 grams of NO<sub>x</sub> per mile. Additionally, in January 2006 the sulfur content of gasoline was required to be on average 30 ppm which assists in lowering the NO<sub>x</sub> emissions. Most gasoline sold in North Carolina prior to January 2006 had a sulfur content of about 300 ppm. These emission reductions are federally enforceable.

*Large Non-road Diesel Engines Rule.* This rule was promulgated in 2004, and is being phased in between 2008 through 2014. This rule will also reduce the sulfur content in the nonroad diesel fuel. When fully implemented, this rule will reduce NO<sub>x</sub>, VOC, particulate matter, and carbon monoxide. These emission reductions are federally enforceable.

*Heavy-duty gasoline and diesel highway vehicle standards.* These standards began to take effect in 2004 and are designed to reduce NO<sub>x</sub> and VOC emissions. These emission reductions are federally enforceable.

*Nonroad spark-ignition engines and recreational engines standards.* The nonroad spark-ignition and recreational engine standards, effective in July 2003, regulate NO<sub>x</sub>, hydrocarbons, and carbon monoxide from groups of previously unregulated nonroad engines. These engine standards apply to large spark-ignition engines (e.g., forklifts and airport ground service equipment), recreational vehicles (e.g., off-highway motorcycles and all-terrain-vehicles), and recreational marine diesel engines sold in the United States and imported after the effective date of these standards.

When all of the nonroad spark-ignition and recreational engine standards are fully implemented, an overall 72 percent reduction in hydrocarbons, 80 percent reduction in NO<sub>x</sub>, and 56 percent reduction in carbon monoxide emissions are expected by 2020. These controls will help reduce ambient concentrations of ozone, carbon monoxide, and fine particulate matter.

*NO<sub>x</sub> SIP Call.* The NO<sub>x</sub> SIP Call created the NO<sub>x</sub> Budget Trading Program designed to reduce the amount of ozone that crosses state lines. By the end of 2008, ozone season emissions dropped by 62 percent from 2000 at all sources subject to the NO<sub>x</sub> SIP Call (EPA, NO<sub>x</sub> Budget Trading Program: 2008 Highlights, October 2009, page 3, available at [http://www.epa.gov/airmarkets/progress/NBP\\_4/NBP\\_2008\\_Highlights.pdf](http://www.epa.gov/airmarkets/progress/NBP_4/NBP_2008_Highlights.pdf)). It follows that the bi-state Charlotte Area benefited from these overall reductions, since it is part of the larger NO<sub>x</sub> SIP Call area. North Carolina provided the NO<sub>x</sub> emission reductions, as the result of the NO<sub>x</sub> SIP Call rule, from North Carolina power plants in the bi-state Charlotte Area, as well as the power plants located directly north and west of the Metrolina region<sup>9</sup> that may impact the Area in the March 28, 2013, submittal. There are four facilities located within the North Carolina portion of the Area located in Gaston, Lincoln and Rowan Counties. The facility west of the Metrolina region is Cliffside, located in Cleveland County, and the facility north of the Metrolina region is Marshall, located in Catawba County. This data is also from the EPA Clean Air Markets Division's database and represents the second and third quarters of the year (April through September), the period during which ozone levels are the highest. Two coal-fired power plants (Buck and Riverbend) were retired on April 1, 2013, and will result in additional emissions reductions.

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<sup>9</sup> For the purposes of this document, the Metrolina region refers to the Charlotte metropolitan area and is inclusive of the bi-state Charlotte nonattainment area.



EPA has considered the relationship of the North Carolina portion of the bi-state Charlotte Area's maintenance plan to the reductions currently required pursuant to CAIR. CAIR was remanded to EPA, and the process of developing a replacement rule is ongoing. However, the remand of CAIR does not alter the requirements of the NOx SIP Call, and the State has now demonstrated that the bi-state Charlotte Area can maintain without CAIR. Therefore, EPA believes that the State's demonstration of maintenance under sections 175A and 107(d)(3)(E) remains valid.

The NOx SIP Call requires states to make significant, specific emissions reductions. It also provides a mechanism, the NOx Budget Trading Program, that states could use to achieve those reductions. When EPA promulgated CAIR, it discontinued (starting in 2009) the NOx Budget Trading Program, 40 CFR 51.121(r), but created another mechanism – the CAIR ozone season trading program – which states could use to meet their SIP Call obligations, 70 FR 25289-90. EPA notes that a number of states, when submitting SIP revisions to require sources to participate in the CAIR ozone season trading program, removed the SIP provisions that required sources to participate in the NOx Budget Trading Program. In addition, because the provisions of CAIR including the ozone season NOx trading program remain in place during the remand, EPA is not currently administering the NOx Budget Trading Program. Nonetheless, all states, regardless of the current status of their regulations that previously required participation in the NOx Budget Trading Program, will remain subject to all of the requirements in the NOx SIP Call even if the existing CAIR ozone season trading program is withdrawn or altered. In addition, the anti-backsliding provisions of 40 CFR 51.905(f) specifically provide that the

provisions of the NO<sub>x</sub> SIP Call, including the statewide NO<sub>x</sub> emission budgets, continue to apply after revocation of the 1-hour ozone NAAQS.

All NO<sub>x</sub> SIP Call states have SIPs that currently satisfy their obligations under the NO<sub>x</sub> SIP Call; the NO<sub>x</sub> SIP Call reduction requirements are being met; and EPA will continue to enforce the requirements of the NO<sub>x</sub> SIP Call even after any response to the CAIR remand. For these reasons, EPA believes that regardless of the status of the CAIR program, the NO<sub>x</sub> SIP Call requirements can be relied upon in demonstrating maintenance. Here, the State has demonstrated maintenance based in part on those requirements.

*CAIR and CSAPR.* CAIR remains in place and enforceable until substituted by a “valid” replacement rule. Regardless of the timing of the transition from CAIR to CSAPR, or a resulting court-ordered interstate transport remedy, emissions of NO<sub>x</sub> and SO<sub>2</sub> have declined significantly and are expected to continue to decrease in the future due to the continuation of CAIR and North Carolina’s own EGU emissions rules.

To the extent that the North Carolina submittal relies on CAIR reductions that occurred through 2012, the recent directive from the D.C. Circuit in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d. 7 (D.C. Cir., 2012) ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period for purposes of CAA section 107(d)(3)(E)(iii) and North Carolina’s request to redesignate the Charlotte Area and seek approval of its maintenance plan and other requirements associated with redesignation. EPA has been ordered by the court to develop a new rule, and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. CAIR thus cannot be replaced until EPA has promulgated a final rule

through a notice-and-comment rulemaking process, states have had an opportunity to draft and submit SIPs, EPA has reviewed the SIPs to determine if they can be approved, and EPA has taken action on the SIPs, including promulgating a Federal Implementation Plan, if appropriate. The court's clear instruction to EPA is that it must continue to administer CAIR until a "valid replacement" exists and thus CAIR reductions may be relied upon until the necessary actions are taken by EPA and states to administer CAIR's replacement. Furthermore, the court's instruction provides an additional backstop; by definition, any rule that replaces CAIR and meets the court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in vacating CSAPR and requiring EPA to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR "might be more severe now in light of the reliance interests accumulated over the intervening four years." *EME Homer City*, 696 F.3d at 38. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR, which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be

addressed. In light of these unique circumstances and for the reasons explained above, EPA is proposing to approve the redesignation request and related SIP revisions for the North Carolina portion of the bi-state Charlotte Area. EPA continues to implement CAIR in accordance with current direction from the court, and thus CAIR is in place and enforceable and will remain so until substituted by a valid replacement rule. North Carolina's SIP revision lists CAIR as a control measure, which was approved by EPA on October 5, 2007, 72 FR 56914, for the purpose of reduction SO<sub>2</sub> and NO<sub>x</sub> emissions.

***Criteria (4) - The North Carolina portion of the Area has a fully approved maintenance plan pursuant to section 175A of the CAA.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA (CAA section 107(d)(3)(E)(iv)). In conjunction with its request to redesignate the North Carolina portion of the bi-state Charlotte Area to attainment for the 1997 8-hour ozone NAAQS, NC DAQ submitted a SIP revision to provide for the maintenance of the 1997 8-hour ozone NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA believes that this maintenance plan meets the requirements for approval under section 175A of the CAA.

*a. What is required in a maintenance plan?*

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as EPA deems necessary to assure prompt correction of any future 1997 8-hour ozone violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. As is discussed more fully below, EPA finds that North Carolina's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the North Carolina SIP.

*b. Attainment Emissions Inventory*

The bi-state Charlotte Area attained the 1997 8-hour ozone NAAQS based on quality-assured monitoring data for the 3-year period from 2008-2010. North Carolina selected 2010 as the attainment emissions inventory year. The attainment inventory identifies a level of emissions in the Area that is sufficient to attain the 1997 8-hour ozone NAAQS. North Carolina began development of the attainment inventory by first generating a baseline emissions inventory for

the State's portion of the bi-state Charlotte Area. As noted above, the year 2010 was chosen as the base year for developing a comprehensive emissions inventory for NO<sub>x</sub> and VOC, for which projected emissions could be developed for 2013, 2016, 2019, 2022, and 2025. The projected summer day emission inventories have been estimated using projected rates of growth in population, traffic, economic activity, and other parameters. Naturally occurring, or biogenic, emissions are not included in the emissions inventory comparison, as these emissions are outside the State's span of control. In addition to comparing the final year of the plan (2025) to the base year (2010) North Carolina compared interim years to the baseline to demonstrate that these years are also expected to show continued maintenance of the 8-hour ozone standard.

The emissions inventory is composed of four major types of sources: point, area, on-road mobile, and non-road mobile. The complete descriptions of how the inventories were developed are discussed in the Appendix B of the March 28, 2013, submittal, which can be found in the docket for this action. Point source emissions are tabulated from data collected by direct on-site measurements of emissions or from mass balance calculations utilizing emission factors from EPA's AP-42 or stack test results. For each projected year's inventory, point sources are adjusted by growth factors based on Standard Industrial Classification codes generated using growth patterns obtained from County Business Patterns. For the electric generating utility sources, the estimated projected future year emissions were based on information provided by the utility company. For the sources that report to the USEPA's Clean Air Markets Division, the actual 2010 average summer day emissions were used. For the other Title V sources, the 2009 data was used which was the latest data available. For the small sources that only report emissions every 5 years, the most recently reported data was used and assumed to be equivalent

to 2009 emissions since these sources do not vary much from year to year. The 2009 emissions data was grown to 2010 using the USEPA's EGAS model.

For area sources, emissions are estimated by multiplying an emission factor by some known indicator of collective activity such as production, number of employees, or population. For each projected year's inventory, area source emissions are changed by population growth, projected production growth, or estimated employment growth.

The non-road mobile sources emissions are calculated using EPA's NONROAD2008a model, with the exception of the railroad locomotives and aircraft engine. For each projected year's inventory, the emissions are estimated using EPA's NONROAD2008a model with activity input such as projected landing and takeoff data for aircraft and national fuel use from the Energy Information Administration for locomotives.

For highway mobile sources, EPA's Motor Vehicle Emission Simulator (MOVES) mobile model is run to generate emissions. The MOVES model includes the road class vehicle miles traveled (VMT) as an input file and can directly output the estimated emissions. For each projected year's inventory, the highway mobile sources emissions are calculated by running the MOVES mobile model for the future year with the projected VMT to generate emissions that take into consideration expected Federal tailpipe standards, fleet turnover, and new fuels.

The 2010 NO<sub>x</sub> and VOC emissions for the North Carolina portion of the bi-state Charlotte Area, as well as the emissions for other years, were developed consistent with EPA guidance and are summarized in Tables 2 through 4 of the following subsection discussing the maintenance demonstration.

*c. Maintenance Demonstration*

The March 28, 2013, submittal updates the maintenance plan included in the November 2, 2011, maintenance plan for the North Carolina portion of the Area. The maintenance plan:

- (i) Shows compliance with and maintenance of the 1997 8-hour ozone NAAQS by providing information to support the demonstration that current and future emissions of NO<sub>x</sub> and VOC remain at or below 2010 emissions levels.
- (ii) Uses 2010 as the attainment year and includes future emissions inventory projections for 2013, 2016, 2019, 2022, and 2025.
- (iii) Identifies an “out year” at least 10 years (and beyond) after the time necessary for EPA to review and approve the maintenance plan. Per 40 CFR part 93, NO<sub>x</sub> and VOC MVEBs were established for the last year (2025) of the maintenance plan (see section VI below). Additionally, NC DAQ opted to establish MVEBs for an interim year (2013).
- (iv) Provides actual and projected emissions inventories, in tons per day (tpd), for the North Carolina portion of the bi-state Charlotte Area, as shown in Tables 2 through 4 below.

**Table 2. Actual and Projected Annual NO<sub>x</sub> Emissions (tpd) for the North Carolina Portion\* of the Bi-state Charlotte Area**

| <b>Sector</b>  | <b>2010</b> | <b>2013</b> | <b>2016</b> | <b>2019</b> | <b>2022</b> | <b>2025</b> |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Point</b>   | 37.97       | 20.03       | 19.29       | 20.28       | 19.19       | 20.02       |
| <b>Area</b>    | 8.16        | 8.24        | 8.31        | 8.42        | 8.49        | 8.67        |
| <b>Nonroad</b> | 41.31       | 35.90       | 30.64       | 26.89       | 24.50       | 23.09       |
| <b>Mobile</b>  | 138.26      | 106.92      | 86.43       | 70.49       | 63.67       | 55.90       |
| <b>Total**</b> | 225.47      | 170.90      | 144.53      | 125.98      | 115.76      | 107.61      |

\*Iredell County emissions for nonattainment area only

\*\* Total taken directly from the March 28, 2013, submittal, which was calculated using county-by-county emissions values rather than the total sector emissions values.



**Table 3. Actual and Projected Annual VOC Emissions (tpd) for the North Carolina Portion\* of the Bi-state Charlotte Area**

| <b>Sector</b>  | <b>2010</b> | <b>2013</b> | <b>2016</b> | <b>2019</b> | <b>2022</b> | <b>2025</b> |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Point</b>   | 14.78       | 15.78       | 17.04       | 18.32       | 19.5        | 20.87       |
| <b>Area</b>    | 57.67       | 56.61       | 56.36       | 57.78       | 59.06       | 63.26       |
| <b>Nonroad</b> | 26.47       | 21.92       | 19.4        | 18.79       | 18.86       | 19.26       |
| <b>Mobile</b>  | 66.70       | 51.32       | 41.58       | 34.47       | 30.21       | 28.67       |
| <b>Total**</b> | 165.44      | 145.48      | 134.26      | 129.26      | 127.63      | 132.06      |

\*Iredell County emissions for nonattainment area only

\*\* Total taken directly from the March 28, 2013, submittal, which was calculated using county-by-county emissions values rather than the total sector emissions values.

**Table 4. Emission Estimates for the North Carolina Portion of the Bi-state Charlotte Area**

| <b>Year</b>                         | <b>VOC (tpd)</b> | <b>NOx (tpd)</b> |
|-------------------------------------|------------------|------------------|
| <b>2010</b>                         | 165.44           | 225.47           |
| <b>2013</b>                         | 145.48           | 170.90           |
| <b>2016</b>                         | 134.26           | 144.53           |
| <b>2019</b>                         | 129.26           | 125.98           |
| <b>2022</b>                         | 127.63           | 115.76           |
| <b>2025</b>                         | 132.06           | 107.61           |
| <b>Difference from 2010 to 2025</b> | <b>-33.38</b>    | <b>-117.86</b>   |

Tables 2 through 4 summarize the 2010 and future projected emissions of NOx and VOC from the North Carolina portion of the bi-state Charlotte Area. In situations where local emissions are the primary contributor to nonattainment, the NAAQS should not be violated in the future as long as emissions from within the nonattainment area remain at or below the baseline with which attainment was achieved. North Carolina has projected emissions as described previously and determined that emissions in the North Carolina portion of the bi-state Charlotte Area will remain below those in the attainment year inventory for the duration of the maintenance plan.

As discussed in section VI of this proposed rulemaking, a safety margin is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. The attainment level of emissions is the level of emissions during one of the years in which the area met the NAAQS. North Carolina selected 2010 as the attainment emissions inventory year for the North Carolina portion of the bi-state Charlotte Area. North Carolina calculated safety margins in its submittal for years 2013, 2016, 2019, 2022, and 2025. The State has decided to allocate a safety margin to the 2013 and 2025 MVEB for the bi-state Charlotte Area. For the year 2013, the NO<sub>x</sub> and VOC safety margins were calculated as 54.57 tpd and 19.96 tpd, respectively. For the year 2025, the NO<sub>x</sub> and VOC safety margins were calculated as 117.86 tpd and 33.38 tpd, respectively.

The State has decided to allocate a portion of the safety margin to the MVEBs to allow for unanticipated growth in VMT, changes and uncertainty in vehicle mix assumptions, etc, that will influence the emission estimations. NC DAQ developed and implemented a four-step approach for determining a factor to use to calculate the amount of safety margin to apply to the MVEBs. The MVEBs to be used for transportation conformity proposes is discussed in section VI. This allocation and the resulting available safety margin for the North Carolina portion of the bi-state Charlotte Area are discussed further in section VI of this proposed rulemaking.

*d. Monitoring Network*

There are currently seven monitors measuring ozone in the North Carolina portion of the bi-state Charlotte Area.<sup>10</sup> NC DAQ operates four of the monitors in the Area, whereas the Mecklenburg County Air Quality (MCAQ) Office operates three of the monitors in Mecklenburg County. The State of North Carolina, through NC DAQ, has committed to continue operation of the monitors in the North Carolina portion of the bi-state Charlotte Area in compliance with 40 CFR part 58 and have thus addressed the requirement for monitoring. EPA approved North Carolina's 2012 monitoring plan on September 21, 2012.

*e. Verification of Continued Attainment*

The State of North Carolina, through NC DAQ, has the legal authority to enforce and implement the requirements of the North Carolina portion of the Area 1997 8-hour ozone maintenance plan. This includes the authority to adopt, implement, and enforce any subsequent emissions control contingency measures determined to be necessary to correct future ozone attainment problems.

The large stationary sources are required to submit an emissions inventory annually to NC DAQ or MCAQ. NC DAQ will commit to review these emissions inventories to determine if any unexpected growth in NO<sub>x</sub> emissions in the Area may endanger the maintenance of the 1997 8-hour ozone NAAQS. Additionally, as new VMT data are provided by the North Carolina Department of Transportation (NC DOT), NC DAQ commits to review these data and determine

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<sup>10</sup> While there is a monitor in York County that the South Carolina Department of Health and Environmental Control (SC DHEC) operates, this monitor is not located within the bi-state Charlotte Area for the 1997 8-hour ozone NAAQS.

if any unexpected growth in VMT may endanger the maintenance of the 1997 8-hour ozone NAAQS.

Additionally, under the Consolidated Emissions Reporting Rule (CERR) and Air Emissions Reporting Requirements (AERR), NC DAQ is required to develop a comprehensive, annual, statewide emissions inventory every three years that is due twelve to eighteen months after the completion of the inventory year. The CERR and AERR inventory years are within a year of the baseline, interim, and final years of the maintenance plan. Therefore, NC DAQ commits to compare the CERR and AERR inventories as they are developed with the maintenance plan to determine if additional steps are necessary for continued maintenance of the 1997 8-hour ozone NAAQS in this Area.

*f. Contingency Measures in the Maintenance Plan.*

The contingency measures are designed to promptly correct a violation of the NAAQS that occurs after redesignation. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the state. A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d).

In the November 2, 2011, and March 28, 2013, submittals, North Carolina affirms that all programs instituted by the State and EPA will remain enforceable and that sources are prohibited from reducing emissions controls following the redesignation of the Area. The contingency plan included in the submittal includes a triggering mechanism to determine when contingency measures are needed and a process of developing and implementing appropriate control measures. The primary trigger of the contingency plan will be a violation of the 1997 8-hour ozone NAAQS (i.e., when the three-year average of the 4th highest values is equal to or greater than 0.085 ppm at a monitor in the Area). The trigger date will be 60 days from the date that the State observes a 4th highest value that, when averaged with the two previous ozone seasons' fourth highest values, would result in a three-year average equal to or greater than 0.085 ppm.

The secondary trigger will apply where no actual violation of the 1997 8-hour ozone NAAQS has occurred, but where the State finds monitored ozone levels indicating that an actual ozone NAAQS violation may be imminent. A pattern will be deemed to exist when there are two consecutive ozone seasons in which the 4th highest values are 0.085 ppm or greater at a single monitor within the Area. The trigger date will be 60 days from the date that the State observes a 4th highest value of 0.085 ppm or greater at a monitor for which the previous season had a 4th highest value of 0.085 ppm or greater.

Once the primary or secondary trigger is activated, the Planning Section of the NC DAQ, in consultation with SC DHEC and MCAQ, shall commence analyses including trajectory analyses of high ozone days and an emissions inventory assessment to determine those emission control measures that will be required for attaining or maintaining the 1997 8-hour ozone NAAQS. By May 1 of the year following the ozone season in which the primary or secondary

trigger has been activated, North Carolina will complete sufficient analyses to begin adoption of necessary rules for ensuring attainment and maintenance of the 1997 8-hour ozone NAAQS.

The rules would become State effective by the following January 1, unless legislative review is required.

At least one of the following contingency measures will be adopted and implemented upon a primary triggering event:

- NOx RACT on stationary sources with a potential to emit less than 100 tons per year in the North Carolina portion of the Metrolina nonattainment area;
- diesel inspection and maintenance program;
- implementation of diesel retrofit programs, including incentives for performing retrofits;
- additional controls in upwind areas.

The NC DAQ commits to implement within 24 months of a primary or secondary trigger, or as expeditiously as practicable, at least one of the control measures listed above or other contingency measures that may be determined to be more appropriate based on the analyses performed.

Similarly, the tertiary trigger will not be an actual violation of the 1997 8-hour ozone NAAQS. This trigger will be a first alert as to a potential air quality problem on the horizon. The trigger will be activated when a monitor in the Area has a 4th highest value of 0.085 ppm or greater, starting the first year after the maintenance plan has been approved. The trigger date will be 60 days from the date that the State observes a 4th highest value of 0.085 ppm or greater at any monitor.

Once the tertiary trigger is activated, the Planning Section of the NC DAQ, in consultation with the SC DHEC and MCAQ, shall commence analyses including meteorological evaluation, trajectory analyses of high ozone days, and emissions inventory assessment to understand why a 4<sup>th</sup> highest exceedance of the standard has occurred. Once the analyses are completed, the NC DAQ will work with SC DHEC, MCAQ and the local air awareness program to develop an outreach plan identifying any additional voluntary measures that can be implemented. If the 4<sup>th</sup> highest exceedance occurs early in the season, the NC DAQ will work with entities identified in the outreach plan to determine if the measures can be implemented during the current season; otherwise, NC DAQ will work with SC DHEC, MCAQ, and the local air awareness coordinator to implement the plan for the following ozone season.

EPA has concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: attainment inventory, monitoring network, verification of continued attainment, and a contingency plan. Therefore, the maintenance plan SIP revision submitted by North Carolina for the State's portion of the Area meets the requirements of section 175A of the CAA and is approvable.

## **VI. What is EPA's Analysis of North Carolina's Proposed NO<sub>x</sub> and VOC Subarea MVEBs for the North Carolina Portion of the Bi-state Charlotte Area?**

Under section 176(c) of the CAA, new transportation plans, programs, and projects, such as the construction of new highways, must "conform" to (i.e., be consistent with) the part of the state's air quality plan that addresses pollution from cars and trucks. Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing

violations, or delay timely attainment of the NAAQS or any interim milestones. If a transportation plan does not conform, most new projects that would expand the capacity of roadways cannot go forward. Regulations at 40 CFR part 93 set forth EPA policy, criteria, and procedures for demonstrating and assuring conformity of such transportation activities to a SIP. The regional emissions analysis is one, but not the only, requirement for implementing transportation conformity. Transportation conformity is a requirement for nonattainment and maintenance areas. Maintenance areas are areas that were previously nonattainment for a particular NAAQS but have since been redesignated to attainment with an approved maintenance plan for that NAAQS.

Under the CAA, states are required to submit, at various times, control strategy SIPs and maintenance plans for nonattainment areas. These control strategy SIPs (including RFP and attainment demonstration) and maintenance plans create MVEBs for criteria pollutants and/or their precursors to address pollution from cars and trucks. Per 40 CFR part 93, a MVEB must be established for the last year of the maintenance plan. A state may adopt MVEBs for other years as well. The MVEB is the portion of the total allowable emissions in the maintenance demonstration that is allocated to highway and transit vehicle use and emissions. *See* 40 CFR 93.101. The MVEB serves as a ceiling on emissions from an area's planned transportation system. The MVEB concept is further explained in the preamble to the November 24, 1993, Transportation Conformity Rule (58 FR 62188). The preamble also describes how to establish the MVEB in the SIP and how to revise the MVEB.

As part of the consultation process on setting MVEBs, the NC DAQ discussed several options for setting the geographic extent of the MVEBs with the transportation partners. NC



DAQ requested feedback on these options or other alternatives for consideration from the transportation partners. NC DAQ received feedback from only two of the transportation partners. As part of the public comment process, the NC DAQ provided several options for establishing the MVEBs.

After considering the comments received, the NC DAQ chose to establish subarea MVEBs based on geographical areas that correspond to the Metropolitan Planning Organization (MPO) and/or Rural Planning Organization (RPO) boundaries. This option is consistent with the Cabarrus-Rowan MPO (CRMPO) request and takes into consideration two of the comments from Mecklenburg-Union MPO (MUMPO). NC DAQ believes that this option is a good compromise between how MVEBs have been established in the past, addressing NC DAQ's concern with Mecklenburg County's on-road mobile source emissions and the preferences of the transportation partners. Further, NC DAQ believes this approach provides additional flexibility to the transportation partners while providing adequate assurance that the 1997 8-hour ozone NAAQS will be maintained in the Metrolina nonattainment area. Accordingly, NC DAQ established MVEBs for the CRMPO (Cabarrus and Rowan Counties), for the Gaston Urban Area MPO and Lake Norman RPO (Gaston, Iredell, and Lincoln Counties), and for the MUMPO and Rocky River RPO (Mecklenburg and Union Counties) geographical areas. Tables 5 through 7 below provide the subarea NO<sub>x</sub> and VOC MVEBs in kilograms per day (kg/day),<sup>11</sup> for 2013 and 2025.

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<sup>11</sup> The conversion to kilograms used the actual emissions reported in the MOVES model. The conversion was done utilizing the "CONVERT" function in an EXCEL spreadsheet.

**Table 5. Cabarrus-Rowan MPO MVEB (kg/day)**

|                                 | <b>2013</b>   | <b>2025</b>   |
|---------------------------------|---------------|---------------|
| <i><b>NOx Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 19,838        | 9,961         |
| Safety Margin Allocated to MVEB | 1,984         | 1,992         |
| <b>NOx Conformity MVEB</b>      | <b>21,822</b> | <b>11,953</b> |
| <i><b>VOC Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 9,863         | 5,425         |
| Safety Margin Allocated to MVEB | 986           | 1,085         |
| <b>VOC Conformity MVEB</b>      | <b>10,849</b> | <b>6,510</b>  |

**Table 6. Gaston Urban Area MPO/Lake Norman RPO MVEB (kg/day)**

|                                 | <b>2013</b>   | <b>2025</b>   |
|---------------------------------|---------------|---------------|
| <i><b>NOx Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 19,957        | 10,360        |
| Safety Margin Allocated to MVEB | 2,211         | 2,181         |
| <b>NOx Conformity MVEB</b>      | <b>22,168</b> | <b>12,541</b> |
| <i><b>VOC Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 10,442        | 5,815         |
| Safety Margin Allocated to MVEB | 1,168         | 1,232         |
| <b>VOC Conformity MVEB</b>      | <b>11,610</b> | <b>7,047</b>  |

**Table 7. Mecklenburg-Union MPO/Rocky River RPO MVEB (kg/day)**

|                                 | <b>2013</b>   | <b>2025</b>   |
|---------------------------------|---------------|---------------|
| <i><b>NOx Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 57,198        | 30,391        |
| Safety Margin Allocated to MVEB | 4,303         | 5,337         |
| <b>NOx Conformity MVEB</b>      | <b>61,501</b> | <b>35,728</b> |
| <i><b>VOC Emissions</b></i>     |               |               |
| On-Road Mobile Emissions        | 26,250        | 14,769        |
| Safety Margin Allocated to MVEB | 2,002         | 2,609         |

|                            |               |               |
|----------------------------|---------------|---------------|
| <b>VOC Conformity MVEB</b> | <b>28,252</b> | <b>17,378</b> |
|----------------------------|---------------|---------------|

As mentioned above, the North Carolina portion of the Area has chosen to allocate a portion of the available safety margin to the NO<sub>x</sub> and VOC MVEBs for 2013 and 2025 (45.20 tpd and 107.38 tpd of the NO<sub>x</sub> 2013 and 2025 safety margins remain, respectively, and 19.96 tpd and 27.95 tpd of the VOC 2013 and 2025 safety margins remain, respectively).

Through this rulemaking, EPA is proposing to approve the subarea MVEBs for NO<sub>x</sub> and VOC for 2013 and 2025 for the North Carolina portion of the bi-state Charlotte Area because EPA has determined that the Area maintains the 1997 8-hour ozone NAAQS with the emissions at the levels of the budgets. Once the subarea MVEBs for the bi-state Charlotte Area are approved or found adequate (whichever is completed first), they must be used for future conformity determinations. After thorough review, EPA has determined that the budgets meet the adequacy criteria, as outlined in 40 CFR 93.118(e)(4), and is proposing to approve the budgets because they are consistent with maintenance of the 1997 8-hour ozone NAAQS through 2025.

## **VII. What is the Status of EPA’s Adequacy Determination for the Proposed NO<sub>x</sub> and VOC Subarea MVEBs for 2013 and 2025 for the North Carolina Portion of the Bi-state Charlotte Area?**

When reviewing submitted “control strategy” SIPs or maintenance plans containing MVEBs, EPA may affirmatively find the MVEB contained therein adequate for use in determining transportation conformity. Once EPA affirmatively finds the submitted MVEB is adequate for transportation conformity purposes, that MVEB must be used by state and Federal

agencies in determining whether proposed transportation projects conform to the SIP as required by section 176(c) of the CAA.

EPA's substantive criteria for determining adequacy of a MVEB are set out in 40 CFR 93.118(e)(4). The process for determining adequacy consists of three basic steps: public notification of a SIP submission, a public comment period, and EPA's adequacy determination. This process for determining the adequacy of submitted MVEBs for transportation conformity purposes was initially outlined in EPA's May 14, 1999, guidance, "Conformity Guidance on Implementation of March 2, 1999, Conformity Court Decision." EPA adopted regulations to codify the adequacy process in the Transportation Conformity Rule Amendments for the "New 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments - Response to Court Decision and Additional Rule Change," on July 1, 2004 (69 FR 40004). Additional information on the adequacy process for transportation conformity purposes is available in the proposed rule entitled, "Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes," 68 FR 38974, 38984 (June 30, 2003).

As discussed earlier, North Carolina's March 28, 2013, maintenance plan submission includes NO<sub>x</sub> and VOC subarea MVEBs for the North Carolina portion of the bi-state Charlotte Area for 2013, an interim year of the maintenance plan, and 2025, the last year of the maintenance plan. EPA is reviewing the NO<sub>x</sub> and VOC subarea MVEBs through the adequacy process. The North Carolina SIP submission, including the bi-state Charlotte Area NO<sub>x</sub> and VOC subarea MVEBs, opened for public comment on EPA's adequacy Web site on February 21, 2013, found at: <http://www.epa.gov/otaq/stateresources/transconf/currrips.htm>. The EPA public

comment period on adequacy for the MVEBs for 2013 and 2025 for the North Carolina portion of the bi-state Charlotte Area closed on March 25, 2013.

EPA intends to make its determination on the adequacy of the 2013 and 2025 subarea MVEBs for the North Carolina portion of the bi-state Charlotte Area for transportation conformity purposes in the near future by completing the adequacy process that was started on February 21, 2013. After EPA finds the 2013 and 2025 MVEBs adequate or approves them, the new subarea MVEBs for NO<sub>x</sub> and VOC must be used for future transportation conformity determinations. For required regional emissions analysis years that involve 2013 through 2024, the applicable 2013 MVEBs will be used and for 2025 and beyond, the applicable budgets will be the new 2025 MVEBs established in the maintenance plan, as defined in section VI of this proposed rulemaking.

#### **VIII. Proposed Action on the Redesignation Request and Maintenance Plan SIP Revision Including Proposed Approval of the 2013 and 2025 NO<sub>x</sub> and VOC Subarea MVEBs for the North Carolina Portion of the Area.**

As discussed above, section 172(c)(3) of the CAA requires areas to submit a base year emissions inventory. EPA approved the 2002 base year emissions inventory for the North Carolina portion of the bi-state Charlotte Area (as submitted in North Carolina's November 12, 2009, 1997 8-hour ozone attainment demonstration SIP revision) on May 4, 2012. *See* 77 FR 26441. Emissions contained in the submittal cover the general source categories of point sources, area sources, on-road mobile sources, and non-road mobile sources. All emission summaries were accompanied by source-specific descriptions of emission calculation procedures

and sources of input data. North Carolina's submittal documents 2002 emissions in the North Carolina portion of the Area in units of tons per summer day. Table 6, below, provides a summary of the 2002 emissions of NO<sub>x</sub> and VOC for the North Carolina portion of the bi-state Charlotte Area.

**Table 6. North Carolina Portion of the Bi-state Charlotte Area 2002 Emissions for NO<sub>x</sub> and VOC (tons per summer day)**

| County             | Point           |     | Area            |      | Non-Road        |      | Mobile          |      |
|--------------------|-----------------|-----|-----------------|------|-----------------|------|-----------------|------|
|                    | NO <sub>x</sub> | VOC | NO <sub>x</sub> | VOC  | NO <sub>x</sub> | VOC  | NO <sub>x</sub> | VOC  |
| Cabarrus           | 2.6             | 2.2 | 0.8             | 6.0  | 5.4             | 2.7  | 17.2            | 21.5 |
| Gaston             | 34.8            | 2.5 | 1.3             | 8.9  | 4.9             | 2.9  | 20.0            | 13.5 |
| Iredell (partial)* | 8.5             | 0.9 | 0.3             | 1.9  | 1.4             | 0.9  | 5.6             | 5.1  |
| Lincoln            | 0.3             | 2.1 | 0.5             | 3.1  | 1.9             | 1.3  | 6.1             | 7.1  |
| Mecklenburg        | 2.1             | 5.7 | 7.0             | 29.4 | 32.1            | 24.1 | 78.7            | 68.0 |
| Rowan              | 11.0            | 6.3 | 0.8             | 5.6  | 4.1             | 2.3  | 19.7            | 14.8 |
| Union              | 0.2             | 1.0 | 1.0             | 6.4  | 7.7             | 4.7  | 11.3            | 13.0 |

\*Only part of Iredell County is in the nonattainment area.

## **IX. What is the Effect of EPA's Proposed Actions?**

EPA's proposed actions establish the basis upon which EPA may take final action on the issues being proposed for approval today. Approval of North Carolina's redesignation request would change the legal designation of Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan and Union Counties in their entireties, and a portion of Iredell County (Davidson and Coddle Creek Townships) in North Carolina, as found at 40 CFR part 81, from nonattainment to attainment for the 1997 8-hour ozone NAAQS. Approval of North Carolina's request would also incorporate a plan for maintaining the 1997 8-hour ozone NAAQS in the North Carolina portion of the bi-state Charlotte Area through 2025 into the SIP. This maintenance plan includes

contingency measures to remedy any future violations of the 1997 8-hour ozone NAAQS and procedures for evaluation of potential violations. The maintenance plan also establishes NO<sub>x</sub> and VOC subarea MVEBs for 2013 and 2025 for the North Carolina portion of the bi-state Charlotte Area. The subarea MVEBs are listed in Tables 5 through 7 in Section VI.

Additionally, EPA is notifying the public of the status of EPA's adequacy determination for the newly-established NO<sub>x</sub> and VOC subarea MVEBs for 2013 and 2025 for the North Carolina portion of the bi-state Charlotte Area.

**X. Proposed Actions on the Redesignation Request and Maintenance Plan SIP Revisions Including Approval of the NO<sub>x</sub> and VOC Subarea MVEBs for 2013 and 2025 for the North Carolina Portion of the Bi-state Charlotte Area.**

EPA previously determined that the entire bi-state Charlotte Area was attaining the 1997 8-hour ozone NAAQS on November 15, 2011, at 76 FR 70656. EPA is now taking two separate but related actions regarding the redesignation and maintenance of the 1997 8-hour ozone NAAQS for the North Carolina portion of the bi-state Charlotte Area. Today's notice of proposed rulemaking is in response to North Carolina's November 2, 2011, SIP revision (as supplemented by a March 28, 2013, SIP revision).

EPA is proposing to determine, based on complete, quality-assured, and certified monitoring data for the 2008 – 2010 monitoring period that the entire bi-state Charlotte Area is attaining the 1997 8-hour ozone NAAQS. Further, based on NC DAQ's November 2, 2011, SIP revision (as supplemented by a March 28, 2012, SIP revision), EPA is proposing to determine

that the North Carolina portion of the bi-state Charlotte Area has met the criteria under CAA section 107(d)(3)(E) for redesignation from nonattainment to attainment for the 1997 8-hour ozone NAAQS. On this basis, EPA is proposing to approve North Carolina's redesignation request for the North Carolina portion of the bi-state Charlotte Area.

EPA is also proposing to approve the maintenance plan for the North Carolina portion of the Area, including the NO<sub>x</sub> and VOC subarea MVEBs for 2013 and 2025, into the North Carolina SIP (under CAA section 175A). The maintenance plan demonstrates that the Area will continue to maintain the 1997 8-hour ozone NAAQS and that the budgets meet all of the adequacy criteria contained in 40 CFR 93.118(e)(4) and (5). Further, as part of today's action, EPA is describing the status of its adequacy determination for the NO<sub>x</sub> and VOC MVEBs for 2013 and 2025 in accordance with 40 CFR 93.118(f)(1). Within 24 months from the effective date of EPA's adequacy determination for the MVEBs or the effective date for the final rule for this action, whichever is earlier, the transportation partners will need to demonstrate conformity to the new NO<sub>x</sub> and VOC MVEBs pursuant to 40 CFR 93.104(e).

If finalized, approval of the redesignation request would change the official designation of Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan and Union Counties in their entireties, and a portion of Iredell County (Davidson and Coddle Creek Townships) in North Carolina, as found at 40 CFR part 81, from nonattainment to attainment for the 1997 8-hour ozone NAAQS.



## **XI. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For this reason, these proposed actions:

- are not “significant regulatory action[s]” subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- are not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

**40 CFR Part 81**

Environmental protection, Air pollution control.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: July, 12, 2013.

A. Stanley Meiburg,  
Acting Regional Administrator,  
Region 4.